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November 10, 2003

**VIA E-MAIL**

California Energy Commission  
1516 Ninth Street  
Sacramento, California 95814-5504

Re: Docket Number 03-RPS-1078  
Docket Unit, MS-4

Dear Sir:

Attached please find the comments of Ridgewood Olinda, LLC to the Needs Assessment for a Western Renewable Energy Generation Information System ("WREGIS") Draft Report.

As an affiliate of a founding member of the NEPOOL GIS Operating Rules Committee, Ridgewood Olinda believes that it would be beneficial for the WREGIS and the NEPOOL GIS to pool their resources regarding the development of a WREGIS and continued operation of the NEPOOL GIS. To that end, I would appreciate that you would contact either Dennis J. Duffy, Chairman of the NEPOOL GIS Operating Rules Committee, or me concerning a potential joint effort. We believe that NEPOOL GIS has accumulated a significant amount of experience and knowledge about GISs, which could help the WREGIS in its formation. By working together, we can benefit ourselves with a better, cheaper GIS for our respective service territories.

You may contact Dennis at (617) 904-3100, x-112 or [dduffy@emienergy.com](mailto:dduffy@emienergy.com).

Sincerely yours,



William P. Short III  
Vice President of Power Marketing

attachments

cc: Dennis J. Duffy  
Ashley Houston

- 1. Should WREGIS be designed to facilitate imports and exports? Please be clear whether you mean imports and exports between states that are part of WREGIS, or between WREGIS and other tracking systems. Proponents should indicate the type of information you believe is necessary to perform either function.**

The WREGIS should be designed to facilitate both imports and exports between both immediately adjacent individual control areas within the WECC, between such immediately adjacent individual control areas of the WECC and ERCOT and between such immediately adjacent individual control areas of the WECC and the immediately adjacent individual control areas of the Eastern Interconnection. All such “system energy” imports and exports should comply with Section 2.7(b) and Section 3.5(a) of the NEPOOL GIS Operating Rules, respectively. All such “unit energy” imports and exports should comply with Section 2.7(c) and Section 3.5(b) of the NEPOOL GIS Operating Rules, respectively. Besides the actual transfer of electrical energy between these areas, the WREGIS certificate should include all RPS-compliance as well as the generating station’s actual air emissions. No equivalent WREGIS certificate to the NEPOOL GIS Reserve Certificate should be permitted unless that WREGIS Reserved Certificate will be used within the calendar year and within the control area where the generating station is located.

- 2. What, if any, additional static or dynamic data are needed to support air quality and regional haze programs and information disclosure and electricity labeling requirements?**

Those certain characteristics of a generating station that qualify that facility for a particular state’s RPS (“static data”) and that generating station’s actual air emissions (“dynamic data”) are the only pieces of data that should be mandatory included in a WREGIS certificate. As a minimum, the actual air emissions listed on the NEPOOL GIS certificate should be the starting point for the WREGIS certificate.

- 3. Should WREGIS include small, customer-sited renewable generation and solar water heating, and if so, how? Proponents should indicate whether they are willing to participate in the development of data measurement, collection and verification methodologies.**

The WREGIS should accommodate small, customer-sited renewable generation provided that such renewable generation is independently metered by the local electric utility. Since the electrical energy is consumed on-site, no ability to transfer the resultant WREGIS certificate to anyone located outside of the state of the generation should be permitted.

Since the WREGIS certificate should only involve electrical energy, customer-sited solar water heating (and geothermal heat pumps) should not be included in the WREGIS.

3. **Should generator information that is voluntarily provided undergo the same level of verification as other information in the database? Or would it be acceptable if WREGIS tracked information that was voluntarily provided (see list on page 7 of the Report), but made no claims as to the accuracy of the information?**

All information voluntarily supplied by the generator should be subject to independently verification by the regulatory authorities of the state where the generator is located. To the extent that a generator is qualified for a particular state's RPS other than the state where the generator is located, that generator's information should be subject to independent review by those applicable state's regulatory bodies.

4. **Are there any other static or dynamic data categories (see pages 7 and 9 of the Report) that may be useful, or for which WREGIS users may want to use to differentiate RECs or generators in the database. Please also indicate how tracking this information will be beneficial (e.g. product differentiation or branding, certification verification, ability to access markets, etc).**

To the extent that a generator produces a beneficial use that is recognized by a state, national or international regulatory body, that information should be included as in the WREGIS certificate and made detachable from WREGIS certificate which represents the RPS compliance. Two such examples are proposed NO<sub>x</sub> credits to be given to wind generators in Massachusetts and methane destruction credits given to landfill gas generators.

5. **Is there any other data from page 8 of the Report that should be periodically updated to meet state policy or certification needs? How frequently should such updates occur?**

All static data should be updated as soon as state policy or certification needs are changed. To the extent possible, such state policy or certification needs should only be changed every six months, at mid-year and year end.

6. **With respect to emissions data, are these data presently collected in your state, and by whom? Would these data be available for use?**

Regarding Ridgewood Olinda, this data is collected by Ridgewood Olinda and reported to local air regulators. This data would be used as the plant's actual air emissions data in the plant's WREGIS certificates.

- 7. Should WREGIS accept emissions "offset" data, as distinct from emissions data, and if so, under what circumstances? Would it be acceptable if this information is voluntarily provided and thus tracked by WREGIS but not verified or substantiated by WREGIS?**

The WREGIS should accept emission "offset" data but not as a substitute to actual air emission data. Such "offset" data must be based upon a state, national or international standard and should be provided by the generator. This information should be made detachable from the WREGIS certificate that is capable of being used for compliance of a particular state's RPS.

- 8. Do you have any specific comments on the recommendation related to disaggregation of RECs in the WREGIS (page9 of the Report)?**

The RPS-compliance portion and actual air emissions of the WREGIS certificates should not be disaggregated. Basically, the WREGIS certificates should adopt the mandatory aggregation standard already adopted by the New England air emission, energy and public service commissions involved with the NEPOOL GIS.

- 10. What are your thoughts on the importance and the feasibility of tracking commodity electricity sales within WREGIS, in addition to tracking the ownership and movement of RECs?**

It is very important that the WREGIS be able to track all commodity electricity sales within the WREGIS in a similar manner to that of the NEPOOL GIS.

- 11. What date/time stamp should be given to RECs that are issued by WREGIS? Proponents of tracking generation more frequently than "daily" and of a "peak/off-peak" designation should provide additional explanation of their rationale.**

WREGIS certificates should be prepared on a monthly based, based upon actual monthly generation recorded by the local electric utility. To the extent that electrical energy is imported/exported into/from an immediately adjacent control area, credit should only be given for actual electrical energy generated, scheduled and delivered into that immediately adjacent control area. Behind the meter and station service electrical energy should be granted WREGIS credit provided that it is metered by the local electric utility.

**12. Do you have any opinions on what organization or agency should administer the WREGIS?**

Given the expertise of the NEPOOL GIS with its contactor, APX, APX is the most qualified entity to administer the WREGIS. All other potential contractors rank a distance second to APX. Given the nature of the NEPOOL GIS, it would be very logically that NEPOOL GIS and WREGIS work together to determine if a common GIS can be develop at a cost savings to both.

**13. Do you have any comments on the WREGIS design and development process laid out in Section 9 of the Report or in the workshop?**

To the maximum extent possible, the WREGIS should mirror the NEPOOL GIS. For example, it should cover all generators not just RPS generators. Funding schemes must be developed to pay for the WREGIS. In certain states, regulatory bodies may be able (or required) to pay for their portion of the WREGIS while in those states with an RPS, both load and generators may be required to pay for WREGIS.

**14. State regulators are invited to review the accuracy of Table 9 of the Report, and provide accurate updates.**

Since Ridgewood Olinda is not a state regulator, this question is not applicable.

**NE-GIS State Regulators Caucus  
Position Memorandum #1**

**To:** NEPOOL NE-GIS Working Group  
**From:** NE-GIS State Regulators Caucus  
**Date:** January 27, 2003

**RE:** Reporting of CO2 emissions by generators

**Issue:**

What values should generators report for CO2 in Part 3 of the NE-GIS certificates?

**The NE-GIS State Regulators Caucus Position:**

1. All generators must report actual emissions of CO2 in Part 3 of the NE-GIS certificates.
2. Part 2 of the NE-GIS certificates is the appropriate place for state-specific eligibility for CO2 netting or offsets to be identified.

**Background**

The NE-GIS State Regulators Caucus (the Caucus) is aware that the State of Maine PUC has provisions in its disclosure rule, allowing certain generators to apply for permission to represent CO2 emissions from their facility as a "netted out" zero value for purposes of retail electricity disclosure to Maine Consumers. The NE-GIS has a checkbox provision for indicating when a generation unit has received this approval from the Maine PUC.

At this time no other New England state has a similar policy allowing for netting of CO2 for purposes of retail electricity disclosure.

In order for the NE-GIS Certificate to provide all necessary data for compliance with attribute laws in any of the six New England States, it is essential that actual CO2 emissions be reported in the NE-GIS. Otherwise, certificates listing zero CO2 emissions could be transferred to suppliers in states which require reporting of actual CO2 emissions, resulting in the inability of the receiving state to determine whether the supplier met a CO2 electricity performance standard, or whether the supplier was accurately disclosing CO2 emissions. Any modification of the NEPOOL NE-GIS rules or procedures which would allow generation units to report "netted" rather than actual CO2 emissions in the NE-GIS could result in one or more states declining to accept NE-GIS certificates as documentation for demonstrating compliance with attribute laws.

Of course, individual states' attribute laws may allow generators and suppliers to provide information to the state in addition to the baseline information documented in the GIS in order to demonstrate compliance with state-specific provisions, one example of which is Maine's CO2 netting option.

Signatures as of 2/7/03

CT DEP	Chris James
CT PUC	David Goldberg
ME PUC	Lucretia Smith
MA DEP	Nancy Seidman
MA DOER	Pat Stanton
NH DEP	Bob Scoot

**NEPOOL-GIS State Regulators Caucus  
Position Memorandum #2**

**To:** NEPOOL-GIS Working Group  
**From:** NEPOOL-GIS State Regulators Caucus  
**Date:** March 24, 2003

**RE:** Certificates are indivisible

**Issue:**

Some market participants have proposed splitting one or more attributes from the New England Power Pool Generation Information System (NEPOOL-GIS) certificate.

**The NEPOOL-GIS State Regulators Caucus Position:**

The NEPOOL-GIS State Regulators Caucus's support for and commitment to the NEPOOL-GIS is contingent on the fundamental design principle that each certificate represents a complete and comprehensive picture of the environmental, social and economic impacts of one particular generation unit. Certificates are, therefore, indivisible.

**Background**

The NEPOOL-GIS State Regulators Caucus (the Caucus) agrees that electricity is a commodity. We further agree that once electricity leaves a particular generation unit and is placed on the electrical transmission grid, its origins cannot be known with certainty.

The NEPOOL-GIS certificate has been specifically designed to capture the reality that the environmental, social and economic impact of each generation unit is unique.

The Caucus believes that compliance with state attribute laws, in all cases, requires that the retail Load Serving Entity (LSE) be able to provide comprehensive information about any generation unit included in its load obligation profile. This comprehensive information includes, among other attributes:

- Name
- Location
- Fuel Source
- Air Emissions
- Renewable Portfolio Standard Eligibility Status

For example, if a certificate could be broken apart into its various attributes, a single disclosure label could list fuel use from one group of generating units and



pollutant emissions from a different group of generating units. A self-consistent disclosure label would list fuel use and pollutant emissions from a single group of generating units.

Another example of the problems associated with breaking a certificate apart into its individual attributes is the likelihood that only the "good" attributes would be acquired by LSEs, leaving the undesirable attributes not traded (i.e., "unsettled" as defined in the NEPOOL-GIS Operating Rules). For numeric attributes like pollutant emissions and fuel use percentage, the attributes that are not acquired by LSEs would be incorporated in the residual mix average, instead of more appropriately being "settled" in an LSE account. Non-numeric attributes like labor and RPS-eligibility are not captured in the residual mix, and therefore the information represented by those attributes would be entirely lost if not "settled" in an LSE account, undermining the intent of disclosure laws.

In order for the NEPOOL-GIS Certificate to provide all necessary data for compliance with attribute laws in any of the six New England States, it is essential that the integrity of the comprehensive information be maintained. Any modification of the NEPOOL-GIS rules or procedures which would allow one or more attributes to be separated from the certificate could result in one or more states declining to accept NEPOOL-GIS certificates as documentation for demonstrating compliance with attribute laws.

Signatures as of 5/30/03

CT DEP	Chris James
CT PUC	David Goldberg
ME PUC	Lucretia Smith
MA DEP	Nancy Seidman
MA DOER	Robert Sydney
NH DEP	Kent Finemore

**NEW ENGLAND POWER POOL  
GENERATION INFORMATION SYSTEM  
OPERATING RULES**

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**NEW ENGLAND POWER POOL  
GENERATION INFORMATION SYSTEM**

**OPERATING RULES**

**PART 1      GENERAL**

**Rule 1.1      Functional Requirements; Cost Allocation**

Appendix 1.1 hereto sets forth the general functional characteristics (the “Functional Requirements”) of the NEPOOL Generation Information System (the “GIS”). To the extent a conflict arises between such Functional Requirements and another GIS Operating Rule, the Functional Requirements shall govern. Nothing set forth in these GIS Operating Rules will affect the allocation of the costs associated with the GIS among the Participants.

**Rule 1.2      Definitions**

Capitalized terms have the meanings given to them in these GIS Operating Rules. Where a capitalized term is not defined herein, that term shall have the same meaning as in Section 1 of the Restated New England Power Pool Agreement (the “Restated NEPOOL Agreement”) or Section 1 of the Restated New England Power Pool Open Access Transmission Tariff (the “NEPOOL Tariff”) or the New England Power Pool System Rules (the “System Rules”), in each case as amended or restated from time to time. If a capitalized term is not defined herein or in the Restated NEPOOL Agreement, the NEPOOL Tariff or the System Rules, that term shall have the same meaning as in the Generation Information System Development and Administration Agreement dated October 26, 2001 (the “GIS Agreement”) between New England Power Pool (“NEPOOL”) and Automated Power Exchange, Inc. (“APX”).

**Rule 1.3      Amendments to Rules and Adoption of New Rules**

(a) Adhering to the requirements under Sections 6, 7 and 10 of the Restated NEPOOL Agreement, the NEPOOL Participants Committee (“NPC”) or its delegatee may in its discretion adopt new GIS Operating Rules or amend existing GIS Operating Rules after such amendments or new GIS Operating Rules have been reviewed by the Markets Committee. After the initial adoption of these GIS Operating Rules by the NPC, new GIS Operating Rules and amendments to existing GIS Operating Rules (including any appendices hereto) that, in either case, are not of an emergency nature, shall become effective on the January 1 or July 1 immediately following their adoption. New GIS Operating Rules or amendments to existing GIS Operating Rules (including any appendices hereto) that are of an emergency nature shall become effective on the date designated by the NPC or its delegatee, in consultation with APX or any successor thereto that is

developing, administering, operating or maintaining the GIS (the “GIS Administrator”). For purposes of this Rule 1.3, a new GIS Operating Rule or an amendment to an existing GIS Operating Rule shall be considered to be of an “emergency nature” if the NEPOOL Project Manager for the GIS (the “NEPOOL GIS Project Manager”) in good faith determines that delaying the effectiveness of such GIS Operating Rule or amendment until the next scheduled semi-annual effective date would:

- (i) materially compromise the functionality of the GIS;
- (ii) materially and adversely affect the usefulness of the GIS as a means of complying with any Attribute Law;
- (iii) materially and adversely affect the rights or interests of an Account Holder (defined below) or the GIS Administrator; or
- (iv) impair the competitiveness of the market for Certificates.

(b) No new GIS Operating Rule or amendment to an existing GIS Operating Rule shall be inconsistent with the provisions of the GIS Agreement or the Functional Requirements. To the extent that the Functional Requirements are inconsistent with the GIS Agreement, then solely for purposes of this Rule 1.3, the Functional Requirements shall govern.

#### **Rule 1.4 GIS Administrator’s Function with Respect to GIS Operating Rules**

(a) The GIS Administrator will develop, implement, administer, operate and maintain the GIS in accordance with these GIS Operating Rules. The GIS Administrator may propose new GIS Operating Rules or amendments to existing GIS Operating Rules to the NEPOOL GIS Project Manager, who shall in turn propose such new GIS Operating Rule or amendment to the Markets Committee. The GIS Administrator shall be provided an opportunity to present its position to the Markets Committee and/or the NPC or its delegatee with respect to any proposed new GIS Operating Rule or amendment to an existing GIS Operating Rule, but the GIS Administrator shall not vote on the adoption of any such GIS Operating Rule or amendment. Notwithstanding the foregoing, the GIS Administrator shall not be required to comply with any GIS Operating Rule that it determines in good faith and in its reasonable discretion would have a material adverse effect on the GIS or which, subject to Rule 1.3(b), is inconsistent with the provisions of the Functional Requirements or the GIS Agreement, provided that it promptly notifies the NEPOOL GIS Project Manager of that determination and its reasons therefor.

(b) The GIS Administrator shall have the sole responsibility for the compilation, indexing, reasonable interpretation and implementation of the GIS Operating Rules.

(c) The GIS Administrator shall review the GIS Operating Rules and recommend any revisions thereto to the NEPOOL GIS Project Manager at least

once a year by November 1 of such year. Any such recommended revisions shall be subject to Rule 1.3.

**Rule 1.5 Cardinal and Non-Cardinal Changes**

Cardinal changes under the GIS Agreement may only be requested thereunder by the NEPOOL GIS Project Manager and only if such Cardinal changes have been approved by the NPC or its delegatee after review by the Markets Committee, adhering to the requirements under Sections 6, 7 and 10 of the Restated NEPOOL Agreement. Non-Cardinal changes under the GIS Agreement may only be requested thereunder by the NEPOOL GIS Project Manager and only if such non-Cardinal changes are approved by the Markets Committee. Any such non-Cardinal changes on which the Markets Committee votes but does not approve shall require approval by the NPC, subject to the voting and appeal requirements under Section 6 of the Restated NEPOOL Agreement, for such non-Cardinal changes to be requested under the GIS Agreement. The NEPOOL GIS Project Manager shall notify the NPC of all non-Cardinal changes that the NPC does not otherwise address.

**Rule 1.6 Dispute Resolution**

Any dispute arising under these GIS Operating Rules between the GIS Administrator and an Account Holder shall be subject to the dispute resolution procedures set forth in Article XI of the GIS Agreement.

**Rule 1.7 Effective Date**

These GIS Operating Rules will become effective, following their adoption by the NPC, upon the initial implementation of the GIS by the GIS Administrator.

**PART 2 CREATION AND INITIAL ASSIGNMENT OF CERTIFICATES**

**Rule 2.1 Creation of Certificates**

(a) The GIS Administrator shall produce an electronic Certificate for each MWh of Energy generated (subject to paragraph (c) below and Rule 2.2(b) below) by:

- (i) those individual New England generation units included in the System Operator's market settlement system ("MSS") ("NEPOOL Generators");
- (ii) those generating units with a nameplate capacity of 5 MW or less which (x) do not provide separately metered data to the MSS, (y) register as Account Holders in accordance with Rule 2.2, and (z) provide the GIS Administrator with meter data meeting the requirements of NEPOOL Operating Procedure No. 18 or any successor thereto ("Non-NEPOOL Generators");

- (iii) those generating units listed on Appendix 2.1 which (x) register as Account Holders in accordance with Rule 2.2, (y) provide the GIS Administrator with meter data meeting the requirements of NEPOOL Operating Procedure No. 18 or any successor thereto, and (z) have provided the GIS Administrator with a certification from the Energy Regulatory Agency listed for it in Appendix 2.1 stating that such generator (1) was placed in service on or before December 31, 2002, (2) is owned by one of the New England states or a political subdivision or agency thereof, and (3) has committed to submit to an annual data quality audit by such Energy Regulatory Agency with respect to the data it provides for the GIS ("Included Generators"); and
- (iv) generating units with a nameplate capacity of 5 MW or less which are represented by persons or entities that (x) have been authorized in writing by one or more of such generating units with an identical fuel source (as set forth in Appendix 2.4) to represent them in the GIS, (y) register as Account Holders in accordance with Rule 2.2, and (z) provide the GIS Administrator with meter data meeting the requirements of NEPOOL Operating Procedure No. 18 or any successor thereto for each of the generating units that they represent (such persons and entities representing such generating units are referred to herein as "Non-NEPOOL Generator Representatives" and together with NEPOOL Generators, Non-NEPOOL Generators and Included Generators, as "GIS Generators").

Such Certificates shall be based on generation information in the MSS for NEPOOL Generators and on generation information provided directly to the GIS Administrator by Non-NEPOOL Generators, Included Generators and Non-NEPOOL Generator Representatives, and on other data provided by each GIS Generator as described in Rule 2.3 and Rule 2.5. The GIS Administrator shall also produce an electronic Certificate for each MWh of Energy imported into the Control Area (subject to paragraph (c) below) based on import information obtained from the System Operator and any other data provided by the Account Holder importing the Energy, the System Operator and certain regulatory agencies, as described in and subject to Rule 2.7. The Certificates created for an Included Generator in any year shall not exceed the limit established for it in Appendix 2.1.

- (b) Certificates will be created quarterly on the 15th day of the calendar quarter (the "Creation Date") that is the second calendar quarter following the calendar quarter in which the Energy associated with a Certificate was generated. Therefore, for example, the Certificates associated with Energy generated in January, February and March of a year will be created on July 15 of that same year. Certificates for Non-NEPOOL Generators, Included Generators and Non-NEPOOL Generator Representatives shall be created on the same date each



quarter as all other Certificates. Each Certificate will denote the month in which the associated Energy was generated. If a Non-NEPOOL Generator, an Included Generator or a Non-NEPOOL Generator Representative provides the GIS Administrator with the requisite meter data after the date that is five days before Certificates are created for any quarter, such Non-NEPOOL Generator's, Included Generator's or Non-NEPOOL Generator Representative's Certificates shall not be created until Certificates are created based on MSS data in the next succeeding calendar quarter. For purposes of these GIS Operating Rules, a "calendar quarter" is the consecutive three-month period beginning with each January, April, July or October.

(c) Certificates will be numbered. No Certificate will be issued for a partial MWh. For NEPOOL Generators, 0.5 MWh or more of Energy in any month will create a Certificate, and less than 0.5 MWh of Energy in any month will not create a Certificate. Non-NEPOOL Generators, Included Generators and Non-NEPOOL Generator Representatives will report meter data for whole MWhs of generation (without any rounding) to the GIS Administrator, and they may aggregate multiple months of Energy in order to report meter data for a whole MWh of Energy generation to the GIS Administrator.

(d) Upon the creation of Certificates each quarter, the GIS Administrator shall deposit such Certificates into the appropriate Account Holder's account. The Certificates that correspond to Energy imported into the Control Area by the System Operator on an emergency basis ("Emergency Energy") shall be deposited into the account of the entity that sold such Energy to the System Operator or that entity's designee, if (x) such seller or designee is an Account Holder and (y) such seller or designee is identified to the GIS Administrator by the System Operator. In such case, the Certificates associated with such Emergency Energy shall be treated as an import in accordance with Rule 2.7 below. If such Certificates associated with Emergency Energy do not satisfy such conditions, such Certificates shall be deposited into a specially designated account, shall not be transferable, and shall be counted as Unsettled Certificates that are used solely for the purpose of Residual Mix Certificates (each defined below).

## **Rule 2.2 Account Holder Registration**

(a) Each person or entity owning Certificates at any time (an "Account Holder") shall have an account in the GIS and must register as an Account Holder with the GIS Administrator. Account Holders that are not Retail LSEs (defined below) shall not be required to be Participants; provided, however, that any Account Holder that is not a Participant shall execute an agreement in the form set forth in Appendix 2.2 hereto agreeing to comply completely with the GIS Agreement and these GIS Operating Rules to the same extent as if it were a Participant and, if and when such non-Participant Account Holder becomes liable to NEPOOL or the System Operator for financial obligations related to the GIS, with the Financial Assurance Policy for Non-Participant Transmission Customers and the NEPOOL Billing Policy attached to the NEPOOL Tariff (as modified to

include financial obligations of non-Participant Account Holders related to the GIS). The GIS Project Manager shall provide notice to each non-Participant Account Holder at least seven (7) days prior to the effectiveness of any change in NEPOOL's GIS cost allocation methodology that would result in such non-Participant Account Holder becoming liable for financial obligations related to the GIS, and such non-Participant Account Holder may withdraw from the GIS prior to the effectiveness of such change without incurring such liabilities. Any Certificates created for a withdrawn Non-Participant Account Holder prior to the date of its withdrawal shall remain in existence until the end of the applicable Trading Period, but that withdrawn Non-Participant Account Holder shall not participate in transfers of Certificates after the date of its withdrawal. To register, Account Holders shall contact the GIS Administrator and shall manually enter data into the GIS database relating to company name, company contact name, affiliated Account Holder names, entity address/contact information (including city, state, country, zip code, phone number, fax number, company email and company website) and whether the Account Holder is registering for an account as a GIS Generator and/or a Retail LSE, or neither a GIS Generator nor a Retail LSE. Subject to paragraph (b) below, each Account Holder, including entities that serve as both generators and load servers, shall have only one account in the GIS database, but Account Holders could have subaccounts within such account, as provided in Rule 4.1. Each Account Holder shall also provide the additional registration information required of it under these GIS Operating Rules.

(b) A generator that is included in the MSS for part of its generation (the "MSS Generation") and that sells or uses part of its generation behind-the-meter (the "Non-MSS Generation") may establish separate GIS assets for the generator's MSS Generation and its Non-MSS Generation, and except for purposes of paragraph (c) below, it shall be deemed to be two distinct GIS Generators for its MSS Generation GIS and its Non-MSS Generation. Any generator establishing two GIS assets under this paragraph shall, with respect to its Non-MSS Generation:

- (x) provide the GIS Administrator with meter data meeting the requirements of NEPOOL Operating Procedure No. 18 or any successor thereto;
- (y) be eligible under one of the RPS fields listed in Part 2 of Appendix 2.4; and
- (z) provide the GIS Administrator with a certification from one of the Energy Regulatory Agencies listed in Appendix 5.3 (1) stating that such GIS Generator has committed to submit to an annual audit by such Energy Regulatory Agency with respect to the quality of the data it provides for its Non-MSS Generation and to confirm that none of the Non-MSS Generation for which Certificates are created is used for such GIS Generator's station service, and (2) establishing an annual limit on the MWhs that such GIS Generator may report to the GIS Administrator for purposes of creating

Certificates for its Non-MSS Generation, which limit shall be based upon a proxy unit with a 5 MW nameplate capacity using the same fuel type.

The Certificates created for a generator's Non-MSS Generation in any year shall not exceed the limit established in the certification provided by the applicable Energy Regulatory Agency described above. Any generator availing itself of this Rule 2.2(b) shall be considered a NEPOOL Generator for purposes of its MSS Generation and a Non-NEPOOL Generator for purposes of its Non-MSS Generation.

(c) For purposes of these GIS Operating Rules, two Account Holders are deemed to be affiliated Account Holders if:

- (i) one Account Holder owns, directly or indirectly, 10% or more of the voting stock or other equity interest in the other Account Holder;
- (ii) 10% or more of the voting stock or other equity interests in both Account Holders are owned, directly or indirectly, by the same person or entity; or
- (iii) one such Account Holder is a natural person, and such Account Holder or a member of such Account Holder's immediate family is an officer, director, partner, employee or representative of the other Account Holder.

## **Rule 2.3      Generation Registration**

(a) GIS Generators and Account Holders owning generating units outside the Control Area that import Energy under Rule 2.7(c) or Account Holders that are the designees of the owners of such generating units (collectively, "Importing Account Holders") must provide the GIS Administrator with information for generation registration. To register, an agent or representative of a GIS Generator or an Importing Account Holder must manually enter data relating to its company name and generator asset identification number as recorded with the System Operator, identification number, if any, assigned to the applicable generating unit by the U.S. Environmental Protection Agency (the "EPA"), person or entity holding legal title to the generating unit and the generating unit's lead Participant, status, location, fuel source, multi-fuel capability, eligibility under certain Attribute Laws (including, if applicable, the level of generation or imported Energy required in any year before the applicable generating unit is eligible under such Attribute Laws), emissions, labor characteristics, location, vintage, and other information, each as identified in the Certificate fields established under these GIS Operating Rules from time to time. When registering, each GIS Generator and Importing Account Holder shall indicate whether or not the applicable generating unit uses continuous emissions monitoring reporting ("CEM Reporting"). Each GIS Generator and Importing Account Holder shall provide the information required by the GIS Administrator to complete all applicable

Certificate fields at the time of its initial registration. Each GIS Generator and Importing Account Holder shall promptly update such information to the extent that it changes after its initial registration. Any update provided after the fifth calendar day preceding any Creation Date shall not apply to the Certificates created on such Creation Date.

(b) If a GIS Generator's agent or representative fails to provide the requisite information, the GIS Administrator shall obtain information regarding such GIS Generator's fuel source from the NX-12 Form most recently provided to the System Operator for such GIS Generator, and the GIS Administrator may obtain such other information regarding such GIS Generator from such NX-12 Form and from the emissions data most recently provided to the applicable Regulators (defined below) by such GIS Generator, although the GIS Administrator has no obligation to obtain this additional information. If a GIS Generator does not provide the GIS Administrator with the requisite information, and the GIS Administrator does not obtain such information on its own, that GIS Generator shall be deemed to have the emissions per MWh most recently provided to the GIS Administrator by one of the Environmental Regulatory Agencies listed on Appendix 5.3 for generators using the same fuel type as the GIS Generator ("Proxy Emissions"), and all other fields for such GIS Generator shall be left blank on its Certificates. A GIS Generator with multi-fuel capability that does not provide the GIS Administrator with the requisite information shall, for purposes of this Rule 2.3(b), be deemed to have the fuel type used by it with the greatest Proxy Emission for carbon dioxide for 100% of its output.

(c) Information for Imported System Energy (defined below) is addressed in Rule 2.7(b).

#### **Rule 2.4 Certificate Fields**

Each Certificate shall list the applicable data described on Appendix 2.4 hereto.

#### **Rule 2.5 Sources of Generation Data**

(a) As a general matter, wherever possible, the GIS will rely upon data obtained from the System Operator or track information provided by Account Holders to the System Operator. Where relevant and necessary information is neither collected nor produced by the System Operator, documentation may be provided directly to the GIS Administrator as set forth in paragraphs (b) through (h) below. All such data submitted to the GIS Administrator will be considered Confidential Information as defined below, subject to the provisions of Part 5 of these GIS Operating Rules. Information for Imported System Energy is addressed in Rule 2.7(b).

(b) Generation data used in the development of Certificates for NEPOOL Generators shall be obtained from the System Operator and will be based upon the monthly settlement statements issued by the System Operator, as adjusted to

reflect monthly meter adjustments (“MMAs”) under Market Rule 18 or any successor thereto prior to the Creation Date for the applicable Certificates. Such Certificates will therefore reflect any unit output adjustments initially made by the System Operator in such settlement statements prior to such Creation Date. Generation data used in the development of Certificates for Non-NEPOOL Generators, Included Generators and Non-NEPOOL Generator Representatives shall be provided to the GIS Administrator by such Non-NEPOOL Generator, Included Generator or Non-NEPOOL Generator Representative in accordance with the procedures established in NEPOOL Operating Procedure No. 18 or any successor thereto.

(c) Each GIS Generator and Importing Account Holder is responsible for providing the GIS Administrator with the applicable generating unit’s primary and, if applicable, additional fuel sources according to the fuel source fields listed in Appendix 2.4 and with the applicable generating unit’s RPS eligibility as set forth in Appendix 2.4 upon its initial registration.

(d) With its initial registration and by the fifth calendar day preceding each Creation Date thereafter, each GIS Generator and Importing Account Holder that has registered a generating unit with multi-fuel capability will submit to the GIS Administrator information reflecting the proportion of output per fuel type, by MWh, generated by the unit during each month in the applicable calendar quarter to which such Creation Date relates, using available sources of information. Such information shall be used to allocate Certificates for such multi-fuel generating units for each month for which it was supplied. Each Certificate issued for a generating unit with multi-fuel capability will reflect only one fuel source, with the fuel source for all of the Certificates for such generating unit for a month reflecting the overall output per fuel type for that month as provided to the GIS Administrator, subject to the rounding provisions set forth in Rule 2.1(c). Until such time as (i) the state Environmental Regulatory Agency identified in Appendix 5.3 for the state in which a multi-fuel generating unit within the Control Area is located approves a methodology for that generating unit to attribute specific emissions to each fuel type used by that unit or (ii) any of the state Environmental Regulatory Agencies identified in Appendix 5.3 approves a methodology for a multi-fuel generating unit outside the Control Area to attribute specific emissions to each fuel type used by that unit (each, an “Approved Emissions Protocol”), each Certificate issued for the applicable multi-fuel generating unit for a month will reflect the average actual emissions for that unit for the month based on all of the fuels used by that unit during that month. Once a GIS Generator’s or Importing Account Holder’s multi-fuel generating unit has an Approved Emissions Protocol, that GIS Generator or Importing Account Holder may provide emissions data to the GIS Administrator by specific fuel type according to its Approved Emissions Protocol, and each Certificate issued for that unit thereafter shall reflect the emissions associated with the fuel type on such Certificate, as reported by such GIS Generator or Importing Account Holder. If a GIS Generator or Importing Account Holder that has registered a generating unit

with multi-fuel capability fails to provide this information by the stated deadline, the GIS Administrator shall list the fuel type used by the GIS Generator with the greatest Proxy Emission for carbon dioxide for 100% of the generating unit's output for such calendar quarter.

(e) (i) Not later than the twenty-fifth calendar day preceding each Creation Date, each GIS Generator and Importing Account Holder registering generating units that use year-round CEM Reporting to the EPA, subject to the monitoring provisions of 40 C.F.R. Part 75, shall provide to the GIS Administrator stack emissions data for each of the emissions fields listed in Appendix 2.4 in pounds per month in that quarterly reporting period. GIS Generators and Importing Account Holders shall provide stack emissions data to the GIS Administrator based on such CEM Reporting for those emissions subject to the monitoring provisions of 40 C.F.R. Part 75.

(ii) Not later than the twentieth calendar day preceding each Creation Date, the GIS Administrator will compare data entered pursuant to paragraph (e)(i) above to data submitted to the EPA Clean Air Market Division's Emissions Tracking System. Not later than the fifteenth calendar day preceding each Creation Date, the GIS Administrator will notify the GIS Generator or Importing Account Holder of any discrepancies of greater than one percent between such data to allow them to address such discrepancies. Not later than the tenth calendar day preceding each Creation Date, the GIS Administrator will notify the Environmental Regulatory Agencies identified in Appendix 5.3 of any unresolved discrepancies of greater than one percent. If so directed in writing by any such Environmental Regulatory Agency, the GIS Administrator will insert the following disclaimer on the affected Certificates: "Air regulators for the state in which the generating unit creating this Certificate is located contest emissions information on this Certificate because it varies by more than one percent from emissions information reported to EPA."

(iii) Not later than the fifth calendar day preceding each Creation Date, GIS Generators and Importing Account Holders registering generating units that use CEM Reporting to the EPA or a state or local environmental regulatory agency, subject to monitoring provisions other than 40 C.F.R. Part 75, shall provide data to the GIS Administrator based on such CEM Reporting for those emissions not subject to the monitoring provisions of 40 C.F.R. Part 75.

(iv) Not later than the fifth calendar day preceding each Creation Date, GIS Generators and Importing Account Holders registering generating units that do not use CEM Reporting for an emission field listed in Appendix 2.4 shall provide stack emissions data to the GIS Administrator for that emission field as most recently reported by that generating unit to the EPA or to one or more state or local environmental regulatory agencies, which data shall be divided by the number of months for which it was provided in order to arrive at a monthly value. If such generating unit does not report stack emissions for an emission field listed

in Appendix 2.4 to either the EPA or a state or local environmental regulatory agency, the GIS Generator or Importing Account Holder shall provide stack emissions data to the GIS Administrator based on its own measurements. GIS Generators and Importing Account Holders registering generating units that do not self-measure shall provide stack emissions data based on AP-42 emission factors found in *Compilation of Air Pollutant Emission Factors, Volume I: Stationary Point and Area Sources* (separated out by fuel type) or on other stack emissions data as provided to a governmental authority in the jurisdiction in which the facility is located. Stack emissions data for new or retrofitted generating units shall be projected based on peer units until such time as actual stack emissions data becomes available for such generating unit; if a generating unit's stack emissions data are projected based on peer units, that fact and the name and location of the peer unit shall be provided to the GIS Administrator by the GIS Generator or Importing Account Holder and shall be included on that GIS Generator's or Importing Account Holder's Certificates.

(v) For cogeneration units, all emissions data provided shall be based solely on the emissions attributable to the Energy output of such generating unit and shall not reflect emissions attributable to the steam output of such generating unit.

(vi) The Environmental Regulatory Agencies identified in Appendix 5.3 may audit any emissions data submitted by GIS Generators or Importing Account Holders. If so directed in writing by any such Environmental Regulatory Agency, the GIS Administrator will insert the following disclaimer on the affected Certificates: "Air regulators for the state in which the generating unit creating this Certificate is located contest emissions information on this Certificate because it varies by more than one percent from emissions information reported to EPA."

(f) Not later than the fifth calendar day preceding each Creation Date, each GIS Generator and Importing Account Holder shall provide the GIS Administrator with information concerning the labor characteristics fields in Appendix 2.4 for each month to which such Creation Date relates.

(g) Upon initial registration, and updated as necessary, each GIS Generator and Importing Account Holder must supply the month and year the generating unit it registered initially achieved commercial operation and, if applicable, the month and year of the commercial operation of any subsequent repowering (including any addition to capacity associated with such repowering). Any update provided after the fifth calendar day before any Creation Date shall not apply to the Certificates created on such Creation Date.

(h) Updating of generator-specific information may be performed by the GIS Generator or Importing Account Holder or its designated agent, subject to confirmation by the GIS Administrator.

## **Rule 2.6 Initial Assignment of Certificates**

The person or entity holding legal title to a particular generating unit within the Control Area or such person's or entity's agent or representative shall be deemed to be the GIS Generator for that unit if such person or entity or such agent or representative is an Account Holder, and each Certificate for such unit shall initially be assigned to such person or entity, without prejudice to which person or entity is the owner of such Certificate for other purposes. If the person or entity holding legal title to a particular generating unit or such person's or entity's agent or representative is not an Account Holder, the Certificates for such unit shall be assigned to the Account Holder with an Ownership Share (without legal title) in that unit's generation. Subject to the foregoing two sentences, Certificates for jointly owned units or units in which multiple Account Holders have an Ownership Share shall initially be assigned to the lead Participant or lead owner of such unit, as reflected in the System Operator's records. Account Holders that are parties to existing bilateral transactions administered by the System Operator, or new bilateral transactions yet to be administered by the System Operator, may (but shall not be required to) use the GIS to effect a transfer, without charge to NEPOOL, of the initial Certificate assignments from the seller to the purchaser in such bilateral transaction. The purpose of these Operating Rules is intended to describe and define an information and accounting system. Nothing contained in these Operating Rules is intended to establish any legal title or ownership to Certificates or any underlying attributes they represent.

## **Rule 2.7 Imports**

(a) All Energy imported into the Control Area must be accounted for through the creation of Certificates for the amount of such imported Energy.

(b) The fields for emissions and fuel sources for Certificates associated with Energy imported into the Control Area (i) prior to the SMD Effective Date, pursuant to a System Contract or pursuant to a Unit Contract not satisfying the requirements of paragraph (c) and (ii) from and after such date, pursuant to an External Transaction purchase not satisfying the requirements of paragraph (c) below (together "Imported System Energy"), shall be provided to the GIS Administrator by one of the Environmental Regulatory Agencies listed on Appendix 5.3. Such Certificate fields for each adjacent control area shall be based (i) on independently audited data for such control area, or (ii) on the average of the emissions and fuel source data for such control area as included in the most recent year's data in the EPA's E-GRID software or AirData database, adjusted to reflect the latest available imports to and exports from such control area, or (iii) on data obtained by such Environmental Regulatory Agency from a local environmental regulatory agency for such control area. The Certificate fields for each adjacent control area that are in effect from time to time shall be posted on the GIS website. At such time as a source control area for Imported System Energy implements a generation information system that is compatible



with the GIS, as determined by the NPC or its delegatee (a “Compatible GIS”), the NPC or its delegatee may amend this Rule 2.7(b) to address the creation of Certificates under this Rule 2.7(b). Each Certificate associated with Imported System Energy will reflect the most recently available overall mix of fuel sources and emissions of the source control area. The Certificate field for location will also be completed for Certificates associated with Imported System Energy. All Certificate fields for Certificates associated with Imported System Energy other than fuel source, emissions and location shall state “not applicable.”

(c) The Certificates for Energy imported into the Control Area (i) prior to the SMD Effective Date, pursuant to a Unit Contract and (ii) from and after such date pursuant to an External Transaction for the output of a particular External Resource identified in the MSS for purposes of the GIS (together “Imported Unit Energy”), shall reflect the attributes of the generating unit generating such Energy if:

- (v) such generating unit is eligible under one of the RPS fields listed in Part 2 of Appendix 2.4;
- (w) such Energy is imported from such generating unit in an adjacent control area into the Control Area with transmission rights over the ties to the Control Area;
- (x) such Energy is actually settled in the MSS;
- (y) the Importing Account Holder importing such Energy has registered the applicable generating unit in the GIS as contemplated by Rule 2.3 and has provided the data contemplated by Rule 2.5; and
- (z) such Importing Account Holder provides the GIS Administrator with (i) evidence, which has been verified by the GIS Administrator, that the generating unit actually generated such Energy, (ii) a NERC tag for such Energy meeting the requirements of the System Rules for External Transactions for Energy and the requirements of the adjacent source control area, and (iii) a certification of the seller of such Energy, in the form set forth in Appendix 2.7A, to the effect that the specified attributes have not been and will not be otherwise sold, retired, claimed, represented as part of Energy sold elsewhere or used to satisfy obligations in another jurisdiction.

(d) The GIS Administrator shall, on a quarterly basis, post on the GIS website and shall mail or electronically mail to the regulatory agency for the source control area listed on Appendix 2.7B a list of the Imported Unit Energy transactions that caused the creation of unit-specific Certificates based on data provided by an Importing Account Holder under paragraph (c) above. Such list shall identify the location of the generating unit generating the Imported Unit Energy to which each such transaction relates, the name of the Importing Account

Holder registering such unit in the GIS, and the Certificate numbers created as a result of such transactions.

## **Rule 2.8      Adjustments to Certificates**

(a)      A GIS Generator or Importing Account Holder may request that the GIS Administrator adjust the number of Certificates to be created for it at least five calendar days prior to the Creation Date on which such Certificates will be created. To effect an adjustment to the number of Certificates, the GIS Generator or Importing Account Holder shall provide the GIS Administrator with clear evidence of the error in its account. Changes to information for GIS Generators and Importing Account Holders may also be made in accordance with the provisions of Rules 2.3 and 2.5.

(b)      MMAs may be submitted after the last calendar day of the month in which the subject Energy was generated. Any adjustments to a GIS Generator's or Importing Account Holder's total number of Certificates that is the result of an MMA that occurs in a Trading Period (defined below) after the Trading Period in which such Certificate was initially issued shall be accounted for by adjusting that GIS Generator's total number of Certificates in such later Trading Period.

## **PART 3      TRANSFERS OF CERTIFICATES**

### **Rule 3.1      Transfers Among Account Holders**

Account Holders may transfer Certificates to other Account Holders at any time during a Trading Period (defined below). Account Holders transferring such Certificates shall reflect such transfer in the GIS by indicating in a designated screen in the GIS that such Certificate has been transferred and selecting the transferee. In turn and in a similar fashion, the Certificate transferee shall confirm the transfer in a designated screen in the GIS. The transferring Account Holder may cancel any Certificate transfer before such transfer has been confirmed by the transferee by withdrawing the transfer in a designated screen in the GIS. The transfer of any Certificate shall only be registered in the GIS upon the electronic notification by both the transferor and the transferee. Account Holders may designate one or more agents for purposes of transfers and acceptances of transfers of Certificates by creating logins for them.

### **Rule 3.2      Trading Period**

(a)      Each Certificate shall be eligible for transfer from its Creation Date until 15 days prior to the end of the calendar quarter in which such Creation Date occurs (the "Trading Period"). For example, the Trading Period for Certificates associated with Energy generated in January, February and March of a year will begin on July 15 of that year and end on September 15 of that year. Any Certificate transfer not confirmed in the GIS in accordance with Rule 3.1 by the end of the applicable Trading Period shall not be effected in the GIS.

(b) In the event that an outage of the GIS of more than 60 consecutive minutes occurs in the five-day interval before the end of a Trading Period, the GIS Administrator shall extend such Trading Period for a period of time equal to the total amount of time lost to such outage, rounded up to a whole 24-hour period.

### **Rule 3.3 Retirement of Certificates; Residual Mix**

(a) At the end of each Trading Period, (i) all trading of Certificates for that Trading Period shall cease, (ii) all Certificates issued for that Trading Period that are neither held in the subaccount of a NEPOOL Participant that is a retail load-serving entity (a “Retail LSE”) nor associated with an export transaction shall be retired (such retired Certificates, other than Reserved Certificates, are collectively referred to herein as “Unsettled Certificates”), and (iii) the GIS Administrator shall issue the quarterly reports contemplated by Part 5 of these GIS Operating Rules. Once a Certificate is retired, it shall cease to exist for purposes of the GIS.

(b) In order to ensure a MWh-for-MWh match of Energy generated by GIS Generators and imported into the Control Area with Certificates created and assigned, each MWh of Energy reflected in the MSS for the applicable calendar quarter that does not have a Certificate associated with it in a Retail LSE’s subaccount at the end of the Trading Period shall be assigned Certificates to be created by the GIS Administrator that reflect the Certificate fields that are per MWh averages of the aggregate characteristics of the remaining Unsettled Certificates for that quarter (“Residual Mix Certificates”). The attributes contained on any Unsettled Certificate at the end of the Trading Period shall become part of the pool of attributes upon which the Residual Mix Certificates shall be issued. Each Residual Mix Certificate will be designated as such on its face. The total number of Residual Mix Certificates created for any Trading Period, having the characteristics described above, shall be equal to (x) the sum of:

- (i) the total number of Unsettled Certificates for such Trading Period;
- (ii) the total number of Reserved Certificates (defined below) for such Trading Period; and
- (iii) the total number of MWhs of negative load in the accounts of all Retail LSEs that have a negative value for their Electrical Load for such Trading Period less (y) the total number of Certificates issued to Non-NEPOOL Generators, Included Generators and Non-NEPOOL Generator Representatives for such Trading Period.

### **Rule 3.4 Reserved Certificates**

(a) Account Holders may sell Certificates directly to third parties in good faith, arm’s length transactions for reasonable value, independent of transactions involving Energy between those purchasers and their Retail LSEs (Certificates sold in such transactions are referred to herein as “Reserved Certificates.”) To

avoid the possibility of double counting Certificates, each Account Holder that sells a Reserved Certificate shall, at the time of such transfer, transfer such Reserved Certificate in the GIS to a specially designated Reserved Certificate account using the procedure described in Rule 3.1 (but without confirmation by the transferee). Transactions involving Reserved Certificates are limited to Certificates representing MWhs generated using a fuel source that is designated as being eligible for such transactions on Appendix 2.4 hereto, it being the intent of this Rule that Fuel Sources identified in Part 1 of Appendix 2.4 that are defined as “renewable” (i) by any Attribute Law or (ii) by any statute, regulation or order or decision of a governmental agency of a New England state with respect to eligibility for monies from a state renewable energy fund would be eligible for Reserved Certificate transactions. A Reserved Certificate may be returned from the Reserved Certificates account to the Account Holder transferring it at any time during the Trading Period for that Certificate if the underlying sale of such Certificate to a third party has not been effectuated. At the end of such Trading Period, all Reserved Certificates in the Reserved Certificate account shall be retired and shall no longer be available for further transfer, and their attributes shall not be included in any Residual Mix Certificates.

(b) At the time that a Reserved Certificate is transferred into the Reserved Certificate account, the Account Holder making such transfer shall provide the GIS Administrator with the name of the transferee of the Certificate that is the subject of that Reserved Certificate transaction. The GIS Administrator shall include in the quarterly reports provided to the Regulators (defined below) under Rule 5.3 a listing of the Account Holder and transferee for each Reserved Certificate transaction during the applicable Trading Period (as represented by the Reserved Certificates in the Reserved Certificate account at the end of such Trading Period). The GIS Administrator will also provide the Regulators with access through the internet portal described in Rule 5.3 to each Certificate involved in such a Reserved Certificate transaction during that Trading Period.

### **Rule 3.5 Exports**

(a) All external sales of Energy that are not accounted for through the designation of specific Certificates, by Certificate number, associated with such exports pursuant to paragraph (b) below shall be assigned Residual Mix Certificates at the end of the applicable Trading Period. At such time as an adjacent control area implements a Compatible GIS, the NPC or its delegatee may amend this Rule 3.5(a) to address the assignment of Certificates under this Rule 3.5(a).

(b) The Certificates associated with Energy exported from the Control Area (i) prior to the SMD Effective Date, pursuant to a Unit Contract and (ii) from and after such date, pursuant to an External Transaction identified in the MSS as a unit-specific External Transaction sale for purposes of the GIS, may be transferred to the purchaser of such Energy if:

- (x) the generating unit generating such Energy is eligible under one of the RPS fields listed in Part 2 of Appendix 2.4;
  - (y) such Energy is exported from the GIS Generator to a purchaser in an adjacent control area with transmission rights over the ties from the Control Area; and
  - (z) the Account Holder exporting such Energy and associated Certificates provides the GIS Administrator with a NERC tag for such Energy meeting the requirements of the System Rules for such External Transactions and the requirements of such adjacent control area.
- (c) Certificates may be exported without associated Energy through the use of Reserved Certificate transactions as described in Rule 3.4, provided that such Certificates meet the requirements of such Rule.
- (d) Solely for purposes of these GIS Operating Rules, Account Holders making external sales of Energy shall be considered “Retail LSEs,” and the amount of Energy sold in an external sale shall be included in calculating such Account Holder’s “Certificates Obligation.” All Certificates exported with associated external sales of Energy under paragraph (b) above shall be deposited into the exporting Account Holder’s subaccount for such exports and shall be used solely to satisfy the Account Holder’s Certificates Obligation associated with the applicable external sale of Energy.

## **PART 4 RETAIL LSE OBLIGATIONS AND ACCOUNTS**

### **Rule 4.1 Retail LSE Obligations, Accounts and Subaccounts**

- (a) Each Retail LSE in the Control Area shall register for one Certificate account with the GIS Administrator and for at least one Certificate subaccount for each state in which it does business as a Retail LSE (regardless of whether such Retail LSE is subject to any Attribute Laws in such state) and for any external sales of Energy. In addition, if a Retail LSE provides Energy to a retail load serving entity that is not a NEPOOL Participant (a “Non-Participant LSE”), such Retail LSE shall register for a separate subaccount for the Energy provided to such Non-Participant LSE. Only Retail LSEs shall have subaccounts within their accounts. Also, each Retail LSE shall have one default subaccount a “Default Subaccount”) created for it.
- (b) Except as provided below, a Retail LSE will have a GIS Certificate obligation calculated in accordance with Rule 4.3 (“Certificates Obligation”). Each Account Holder’s Certificates Obligation will be rounded to whole MWh amounts, with 0.5 MWh or more being counted as 1 MWh and less than 0.5 MWh being counted as 0 MWh.
- (c) For purposes of these GIS Operating Rules, a “Non-LSE Load Holder” is
- (x) an entity that has Electrical Load associated with a Registered Load Asset, as

recorded by the System Operator, but that does not have the obligation to comply with the Attribute Laws with respect to that Registered Load Asset or a contractual obligation with a Non-Participant LSE that has an obligation to comply with the Attribute Laws with respect to that Registered Load Asset or (y) if no such Attribute Laws apply to that Registered Load Asset, an entity that does not have a contractual relationship with either the retail customers represented by that Registered Load Asset or with a Non-Participant LSE that in turn has a contractual relationship with the retail customers represented by that Registered Load Asset. Each Non-LSE Load Holder is required (i) to notify the GIS Administrator of the identity of the Retail LSE that has the obligation to comply with the Attribute Laws with respect to the subject Registered Load Asset or otherwise has the contractual relationship with the retail customers represented by the subject Registered Load Asset or otherwise has a contractual relationship with a Non-Participant LSE that in turn has such an obligation or contractual relationship (the “Serving LSE”) and (ii) to transfer within 15 days after each Creation Date at no cost its Certificates Obligations for the subject Registered Load Asset for the applicable quarter to the Serving LSE for such Registered Load Asset, in each case by so indicating in a designated screen in the GIS. Such Serving LSE is required to accept such Certificates Obligation. The Electrical Load for which a Retail LSE shall have a Certificates Obligation will include any and all line losses, as already calculated into the settlements data provided to the GIS Administrator by the System Operator.

(d) Each Retail LSE’s Certificates Obligation shall initially be assigned to its Default Subaccount, and each Retail LSE must disaggregate such Certificates Obligation into the appropriate subaccount(s) for the states in which it does business. A Retail LSE’s Certificates Obligation in any state may be further disaggregated into separate subaccounts for each product offered by such Retail LSE in a particular state, at the Retail LSE’s discretion and as designated by the Retail LSE to the GIS Administrator.

(e) The Certificates on deposit in any Retail LSE’s subaccounts in any Trading Period may not at any time exceed its Certificates Obligation for that Trading Period. Retail LSEs may hold Certificates in their Default Subaccounts without assigning them to any other subaccount.

#### **Rule 4.2 Attribute Laws for Retail LSE Subaccounts**

For each subaccount held by it (including any subaccounts held for the Energy provided to Non-Participant LSEs), a Retail LSE shall indicate in the GIS database whether the Attribute Laws of any state apply to the retail load represented by such subaccount.

#### **Rule 4.3 Calculation of Certificates Obligation**

(a) The GIS Administrator shall calculate on each Creation Date the Certificates Obligation of each Retail LSE for that Trading Period with MSS data

for Electrical Load in the applicable calendar quarter obtained from the System Operator, adjusted to account for any MMAs occurring prior to that Creation Date. The GIS Administrator shall determine a Retail LSE's Certificates Obligation by subtracting from such Electrical Load applicable to such Retail LSE that Retail LSE's entitlement or ownership share of Energy used for pumping at a pumped storage facility owned by that Retail LSE or in which that Retail LSE has an Ownership Share during that calendar quarter (or the comparable figures for the transferor of that Retail LSE's Certificates Obligation), which shall be provided by the applicable Retail LSE at least five calendar days before the applicable Creation Date.

(b) Certificates Obligations for load serving obligations during a calendar quarter may only be satisfied with Certificates associated with Energy generated during such calendar quarter. Certificates Obligations in any Default Subaccount for any calendar quarter may only be satisfied with Residual Mix Certificates for the same calendar quarter.

(c) Each Retail LSE shall inform the GIS Administrator before the end of the applicable Trading Period how to allocate its total Certificates Obligation in its Default Subaccount for that Trading Period among its other GIS subaccounts, including any subaccounts it maintains to account for its contractual relationships with Non-Participant LSEs.

(d) MMAs may be submitted after the last calendar day of the month in which the load occurred. Any adjustments to a Retail LSE's Certificates Obligation that is the result of an MMA that occurs in a Trading Period after the Trading Period in which such Certificates Obligation was originally calculated shall be accounted for by adjusting that Retail LSE's Certificates Obligation in such later Trading Period.

#### **Rule 4.4 Allocation of Residual Mix Certificates**

After the close of each Trading Period, the GIS Administrator shall assign Residual Mix Certificates to each MWh of Certificates Obligations in each Retail LSE's subaccounts that does not have a Certificate already associated with it.

#### **Rule 4.5 Transfer of Certificates Obligations**

A Retail LSE may transfer any part of its Certificates Obligation to any subaccount held by such Retail LSE or to any unrelated accounts held by another Account Holder. If such transfer is to or between any subaccounts held by the same Account Holder, such Account Holder shall so notify the GIS Administrator. If such transfer is to another Account Holder (other than a transfer contemplated by Rule 4.1(c)), the transferring Retail LSE shall reflect such transfer in the GIS by indicating in a designated screen in the GIS that such Certificates Obligation has been transferred and selecting the transferee. In turn and in a similar fashion, the transferee of the Certificates Obligation shall confirm

the transfer in a designated screen in the GIS. The transferring Account Holder under this Rule 4.5 may cancel any Certificates Obligation transfer before such transfer has been confirmed by the transferee by withdrawing the transfer in a designated screen in the GIS. The transfer of any Certificates Obligation (other than a transfer contemplated by Rule 4.1(c)) shall only be registered in the GIS upon the electronic notification by both the transferor and the transferee.

#### **Rule 4.6      Energy Used for Pumped Storage**

In order to ensure a MWh-for-MWh match of Energy generated by GIS Generators and imported into the Control Area with Certificates created and assigned, a separate account (the “Pumped Storage Account”) will be created, with a separate Certificates Obligation for each calendar quarter equal to the excess of (x) Energy used for pumping at pumped storage facilities in the Control Area during such calendar quarter over (y) Energy generated by such pumped storage facilities during such calendar quarter. The GIS Administrator shall obtain figures for such amounts from the MSS. The Pumped Storage Account shall not have an Account Holder associated with it. At the end of each Trading Period, Residual Mix Certificates shall be assigned to each MWh of Certificates Obligations in the Pumped Storage Account.

### **PART 5      REPORTS AND ACCESS TO INFORMATION**

#### **Rule 5.1      Current Account Status**

Each registered Account Holder shall have access, via a secure password-restricted internet portal, to the current status of its account and subaccounts, if any. Such status shall include, at a minimum, a listing of the Certificates in each of such Account Holder’s accounts and subaccounts and the Certificates which another Account Holder has proposed to transfer to such Account Holder using the mechanism described in Rule 3.1 but which such Account Holder has not yet accepted. Each Account Holder shall be able to view in real time the fields for each Certificate in each of its accounts and subaccounts.

#### **Rule 5.2      Reports for Account Holders**

(a)      The GIS Administrator will furnish electronically to each registered Account Holder quarterly and annual reports that aggregate by MWh the various Certificate fields listed on the Certificates owned by such Account Holder for such reporting period. Quarterly reports shall be provided by the 5th day after the close of a Trading Period, and annual reports shall be produced by June 20 of the year following the year to which the report applies. Annual reports shall include amounts for the generation occurring and Certificates Obligations arising during the applicable calendar year and shall include Certificates transactions that occurred during the portions of the Trading Periods that occurred following the end of such calendar year. Account Holders may view only data for their individual accounts and subaccounts.



(b) In addition to the particular Certificate fields mentioned above, each periodic Account Holder's report shall also include the Account Holder's identification number, range of Certificate identification numbers for the Certificates owned by it, and a listing by date and Certificate number of each Certificate creation, Certificate transfer to or from another Account Holder, and Certificate retirement during the applicable reporting period. The GIS Administrator shall provide Account Holders with the ability to group these reports by any field and any subaccount.

(c) Reports provided to a Retail LSE shall also indicate the total Certificates Obligation attributed to such Retail LSE and any transfers of Certificates Obligations during the reporting period. Reports provided to a GIS Generator or an Importing Account Holder shall also include the total amount of Energy attributed to such GIS Generator or Importing Account Holder during the reporting period.

### **Rule 5.3 Reports for Regulatory Agencies**

(a) Each of the regulatory agencies listed on Appendix 5.3 (the "Regulators") and the System Operator shall have access, via a secure, password restricted internet portal, to quarterly and annual reports generated by the GIS Administrator. Quarterly reports shall be provided by the 5th day after the close of a Trading Period and shall relate solely to such Trading Period; and annual reports shall be produced by July 1 of the year following the year to which the report applies. Annual reports shall include amounts for the generation occurring and Certificates Obligations arising during the applicable calendar year and shall include Certificates transactions that occurred during the portions of the Trading Periods that occurred following the end of such calendar year.

(b) Each report provided to the Regulators and the System Operator shall include the following information:

- (i) List of GIS Generators identified by name and date commercial operations were commenced, categorized by fuel source;
- (ii) List of Retail LSEs with GIS accounts, identified by name and categorized by state(s) for which they hold subaccounts;
- (iii) Total MWh of Energy generated in the Control Area during the reporting period;
- (iv) Total MWh of Energy imported into the Control Area during the reporting period;
- (v) Allocation of Certificates among retail load in each state during the reporting period, categorized by fuel source;
- (vi) Total Unsettled Certificates retired at end of Trading Period, by fuel source and with average emissions;

- (vii) Average, in pounds, of each of the emissions listed in Appendix 2.4 that is attributable to load in each state as a result of the Certificate allocation during the reporting period;
- (viii) For each GIS Generator, the pounds of each of the emissions listed in Appendix 2.4 for such reporting period;
- (ix) List of GIS Generators and Importing Account Holders reporting emissions by specific fuel type for multi-fuel generating units pursuant to Rule 2.5(d);
- (x) Total MWh of Energy exported from the Control Area during the reporting period;
- (xi) Total number of Reserved Certificate transactions for the reporting period, together with the Account Holder transferring each such Reserved Certificate and the transferee of each Certificate subject to such a Reserved Certificate transaction;
- (xii) a list of all Certificates designated as Reserved Certificates at the end of the reporting period together with access via the internet portal to such Certificates; and
- (xiii) a description of the Residual Mix Certificates during the reporting period, with and without giving effect to the Reserved Certificate transactions during that reporting period.

(c) Notwithstanding the availability of such reports to the Regulators, each entity subject to any Attribute Law is responsible for demonstrating compliance with that Attribute Law, and neither the GIS Administrator nor NEPOOL nor the System Operator nor the NEPOOL GIS Project Manager has any responsibility for ensuring an entity's demonstration of Attribute Law compliance.

#### **Rule 5.4 Publicly Available Reports**

(a) The GIS Administrator will prepare and post in a publicly available portion of the GIS website the quarterly and annual reports described below. Quarterly reports shall be posted by the 5th day after the close of a Trading Period and shall relate solely to such Trading Period; and annual reports shall be posted by July 1 of the year following the year to which the report applies. Annual reports shall include amounts for the generation occurring and Certificates Obligations arising during the applicable calendar year and shall include Certificates transactions that occurred during the portions of the Trading Periods that occurred following the end of such calendar year.

(b) The reports posted on the GIS Administrator's website shall include a directory of all Account Holders in the reporting period, and, for each Account Holder, the following information:

- (i) Name of Account Holder;
- (ii) Name of Account Holder's designated representative;
- (iii) Street address or post office box number;
- (iv) City, state or province, and ZIP or postal code;

- (v) Country (if not the United States);
- (vi) Telephone and fax number;
- (vii) E-mail address (with hypertext link);
- (viii) Web site address (with hypertext link);
- (ix) Total exports, in MWh, for the four most recent quarterly Trading Periods; and
- (x) Total number of Reserved Certificate transactions for the four most recent quarterly trading periods.

For each Account Holder, the GIS Administrator shall indicate whether it is a GIS Generator and/or a Retail LSE or neither a GIS Generator nor a Retail LSE.

(c) The GIS Administrator shall post for each GIS Generator a list of the following information from the GIS Generator's Certificate fields for the applicable reporting period:

- (i) Asset identification numbers;
- (ii) Facility names and locations;
- (iii) Fuel sources; and
- (iv) Eligibility under state renewable portfolio standards; and
- (v) Total generation, in MWh, for the four most recent quarterly Trading Periods.

(d) The GIS Administrator shall post for each Retail LSE its total Certificates Obligation over the four most recent quarterly Trading Periods and its total imports, in MWh, for the four most recent quarterly Trading Periods.

(e) The publicly available reports posted on the GIS Administrator's website shall include an aggregation and/or average, as appropriate, of the Certificate fields for all Certificates created during the reporting period.

(f) The GIS Administrator shall conspicuously display the following disclaimer in upper case and in bold font on each report posted on its website: **DISCLAIMER: NEITHER THE GIS ADMINISTRATOR NOR NEPOOL NOR THE SYSTEM OPERATOR NOR THE NEPOOL GIS PROJECT MANAGER KNOWS OR ENDORSES THE CREDITWORTHINESS OR REPUTATION OF ANY GIS ACCOUNT HOLDER LISTED IN THIS DIRECTORY.** The GIS Administrator may provide other information that describes the GIS as it deems convenient or necessary for administering GIS, provided that such additional information shall not include any Confidential Information (defined below). The GIS Administrator shall maintain hypertext links to the appropriate pages on the various New England state web sites that are related to the GIS Program.

## **Rule 5.5 Reports for the System Operator**

The GIS Administrator will furnish electronically to the System Operator quarterly and annual reports that aggregate by MWh for the applicable period the

number of Certificates issued for each of the Fuel Sources set forth in Part 1 of Appendix 2.4, the number of Certificates meeting the requirements for RPS Eligibility for each of the items listed in Part 2 of Appendix 2.4, and the number of Certificates for each of the locations listed in Part 8 of Appendix 2.4. Quarterly reports will be provided by the 5th day after the close of a Trading Period and shall relate solely to such Trading Period; annual reports shall be produced by July 1 of the year following the year to which the report applies. Annual reports shall include amounts for the generation occurring during the applicable calendar year.

#### **Rule 5.6      Reports for CRS**

Within five days after the end of each Trading Period, the GIS Administrator will furnish electronically to the Center for Resource Solutions a report that will include the following information for each GIS Generator that indicated Green-e eligibility for Certificates created during such Trading Period:

- (i) Name, mailing address, email address and contact person;
- (ii) Fuel source(s) from Part 1 of Appendix 2.4;
- (iii) Green-e fuel source from Part 9 of Appendix 2.4;
- (iv) Vintage information from Part 5 of Appendix 2.4;
- (v) Generating capacity; and
- (vi) Nitrogen oxide emission rate for Certificates for the applicable Trading Period.

#### **Rule 5.7      Market Surveillance Reports**

The GIS Administrator will produce the reports required under the NEPOOL GIS Market Surveillance Protocol, as in effect from time to time.

#### **Rule 5.8      Confidential Information**

(a) The following information will be considered Confidential Information for the purposes of these GIS Operating Rules:

Any information that:

- (i) is furnished by an Account Holder (the “Furnishing Account Holder”) to the GIS Administrator or by the GIS Administrator to an Account Holder in connection with the GIS; and
- (ii) constitutes trade secrets or commercial or financial information, the disclosure of which would harm the Furnishing Account Holder or prejudice the position of that Account Holder in the NEPOOL power markets; and
- (iii) has been designated in writing by the Furnishing Account Holder as confidential or proprietary either in the document which provided such information, in the transmittal materials

accompanying such information, or in a separate document which identifies the information with sufficient specificity and clarity so that the entity receiving such information has been made aware that the Furnishing Account Holder seeks confidential treatment for such information.

(b) Confidential Information shall exclude information if and to the extent such information:

- (i) is or becomes generally available to the public without any party violating any obligation of secrecy relating to the information disclosed; or
- (ii) is received in good faith from a third party who discloses such information on a non-confidential basis without violating any obligation of secrecy relating to the information disclosed; or
- (iii) is in the public domain; or
- (iv) can be shown by the recipient's prior records to have been already known to the recipient other than through disclosure by a third party which would not be subject to exclusion based on (ii) above.

(c) Confidential Information shall be considered the sole and exclusive property of the Furnishing Account Holder and shall be used solely for the purposes for which it was supplied to the GIS Administrator by the Furnishing Account Holder and for the purposes set forth in these GIS Operating Rules. Confidential Information may only be disclosed to a third party:

- (i) with the consent of the Furnishing Account Holder; or
- (ii) when required by law or regulation or as may be required or appropriate in response to any summons or subpoena or in connection with any litigation or administrative proceeding.

## FUNCTIONAL REQUIREMENTS

### 1. Introduction

The GIS must contain generation information for each individual New England generation unit that is subject to NEPOOL central dispatch or otherwise participates in the GIS, creating generator-specific and importing system-specific Certificates that identify the relevant generation attributes necessary to demonstrate satisfaction of the various Attribute Laws.

### 2. Sources of Generation Information for GIS.

The System Operator currently provides monthly settlement statements to all NEPOOL Participants that take part in the wholesale electricity markets administered by the System Operator, through the MSS. Those monthly statements are based on hourly load and supply assignments for all market participants as produced by the System Operator's markets software. The initial generation credits produced by the real-time dispatch of generation based on telemetered data are modified by revenue quality meter readings that are submitted within 48 hours of the close of each day's market. The MSS also produces hourly scheduled Energy flows of imports and exports over the external ties to and from the Control Area. Those tie-lines connect to New Brunswick (1), Quebec (2), and New York (8). Small wholesale generators that are not telemetered as part of the real-time wholesale market but that request inclusion in the MSS database are included in the overall MSS database based on revenue-quality meter readings. Those readings are submitted within 48 hours of the close of each day's market.

The basic MSS database maintained for financial settlement purposes will provide the initial set of inputs for hourly generation credits by resource for NEPOOL Generators in the GIS database. The MSS will need to be modified to include some additional information on individual generation units, and the cost of that upgrade shall be included in the capital costs of the GIS to be incurred by the GIS Administrator in developing the GIS. In addition, labor characteristics and possibly some other characteristics that are not kept in the MSS, as well as generation information for Non-NEPOOL Generators, Included Generators and Non-NEPOOL Generator Representatives, may be provided directly to the GIS Administrator by the GIS Generators.

### 3. Sources of Retail Load, Export and Wholesale Station Service Withdrawal Information for GIS.

System Operator monthly settlement statements include information on Energy withdrawals in the form of exports of Energy to neighboring control areas and supply of wholesale station service power to some generating facilities when they are not generating. System Operator monthly settlement information for Energy responsibility, however, is not necessarily reflective of the associated participant's retail load serving responsibility. For example, a monthly settlement statement may reflect the wholesale bilateral supply of wholesale Energy by a wholesale supplier with no Adjusted Net Interchange reflected in the statement of the Retail LSE. The System Operator does have information as to the owner of each load asset, which is

not necessarily the retail load serving entity for that load asset. The GIS Administrator must ascertain hourly retail load responsibility by Retail LSE, based on the combination of System Operator information available and information provided by that Retail LSE.<sup>1</sup>

#### **4. GIS Database.**

The GIS database will be a stand-alone database, separate from the MSS. It will need frequent modifications in the first few years to accommodate evolving Attribute Laws and changes in the GIS Operating Rules.

In addition to the hourly data, which will be listed on the Certificates, provided from the MSS database, the GIS database will need to include fields for other data, on a product-by-product basis. The GIS database shall include the ability to be expanded to include many additional fields. The current list, as expanded by Appendix 2.4, includes, but is not limited to, the following:

- Fuel Source
- Hydro size
  - Less than 100MW
  - Greater than 100MW
- Hydro type
- Solid waste
- Biomass
  - sustainable
  - low emission, advanced
  - other
- Qualifying cogeneration (ME)
- Vintage (year commercially operational or as otherwise required by state regulations)
- Union labor (MA)
- Emissions factors for SO<sub>x</sub>, NO<sub>x</sub>, and CO<sub>2</sub> which may vary over time or by fuel
- Eligibility for state RPS (MA, ME, CT)<sup>2</sup>
- Identification of specific unit
- Location
- Time and date of generation
- Certificate ownership share (for multiple owners of a generator)

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<sup>1</sup> Where either a retail load has switched to a different Retail LSE or a Retail LSE has contracted with a third party for the management of its generation disclosure obligations, such transfer or contract must be confirmed by the transferee or third party.

<sup>2</sup> Eligibility will be determined by the applicable regulatory agency pursuant to the applicable Attribute Laws.

The GIS Administrator will develop and maintain the database, as well as catalog the initial assignment of Certificates and any trading of Certificates, and provide reports on net Retail LSEs' attribute accounting to facilitate verification by the appropriate state agency. Entry and updating of generator-specific attributes may be performed by the GIS Generator or Importing Account Holder or its designated agent, subject to confirmation by the GIS Administrator.

## **5. Production of Certificates.**

The GIS Administrator will produce Certificates based on the hourly generation information from the settlements database and/or from information provided by GIS Generators. The certificates will be numbered and may or may not include additional information from the other fields in the GIS database. Each certificate will provide sufficient information (or access to information in the GIS database) so that a participating Person will be able to determine, in combination with other Certificates, its ability to comply with Attribute Laws.<sup>3</sup>

The owner for each generator whose output is settled through the NEPOOL wholesale Energy market will receive from the GIS Administrator a quarterly statement of the Certificates created by its quarterly generation. In addition, the GIS will reflect end-of-the-month adjustments to meter reads and load asset values effected by the System Operator.

## **6. Transfer of Certificates.**

Certificates may be transferred through a variety of mechanisms. Persons will be able to self-supply, arrange bilateral exchanges in advance of actual generation, purchase Certificates through a central bulletin board or auction, and exchange Certificates through private arrangements over a later period of time. In addition, the GIS database shall be flexible enough to permit new types of transfers as they arise. Regardless of the exchange process used, any Person transferring Certificates will be required to notify the GIS Administrator of the transfer prior to the close of the trading period.

## **7. Retirement of Certificates.**

Issuances and trading of Certificates between and among Persons participating in the GIS will occur over a multi-month period. After each Trading Period, the Retail LSE accounts maintained by the GIS Administrator will be closed and a report sent to each Account Holder. Compliance with Attribute Laws will be determined by regulatory authorities based on the quarterly reports produced for each year.

At the end of each Trading Period, all trading of certificates for that quarter will cease and the GIS Administrator will issue a final report to regulators and Persons participating in the GIS of

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<sup>3</sup> It is not intended that the GIS will impact the allocation of generation attributes under bilateral agreements.



the aggregate characteristics of remaining Unsettled Certificates for that Trading Period (the "Residual Mix").<sup>4</sup>

It is anticipated that certain renewable (or other) generators may continue a current practice of selling the rights to attributes represented by Certificates, or the Certificates themselves, directly to third parties independent of transactions between those third parties and their retail LSEs. To avoid the possibility of double counting Certificates, the GIS Administrator will provide a mechanism for generators to inform the GIS Administrator of Certificates transacted under these transactions. At the end of each quarter, the GIS Administrator will exclude any such Certificates from determination of any retail LSE's account balance, and from the determination of Unsettled Certificates and the Residual Mix.

#### **8. Retail LSE Obligations.**

Each Retail LSE will have a Certificates account with the GIS Administrator. Each account will have a Certificates Obligation equal to all of its retail Energy sales in each calendar quarter, including retail line losses consistent with local distribution company allocation of line losses. The Certificates Obligation may be disaggregated into subaccounts for each product offered by the Retail LSE, at the Retail LSE's discretion. To the extent required to demonstrate compliance with Attribute Laws, Retail LSEs must obtain, through bilateral transactions or otherwise, Certificates equal to all or part of its Certificates Obligation in each quarter. If sales or trades of Certificates are made, the GIS Administrator must be notified and will register such transfer. GIS Participants that do not have retail load obligations would not be required to obtain Certificates. The final balance of Certificates in each of a retail LSE's accounts, as well as any shortfall in Certificates relative to its Certificates Obligation, will be reported to each retail LSE and to regulators if applicable.

#### **9. Verification of Retail LSE Claims.**

The GIS will maintain one or more subaccounts based on the request of each participating person that serves retail load. For Retail LSEs selling multiple products, there will be a subaccount for each product. The GIS Administrator will follow and document all Certificate exchanges from and between all relevant accounts. Each account will also specify the corresponding MWhs assigned to each wholesale, retail and product subaccount. On a quarterly basis, the GIS Administrator will provide a report to each participating person for each account and subaccount in the database. Those quarterly reports will form the basis for the retail LSEs to make filings with the state agency or agencies that administer the relevant Attribute Laws.

#### **10. Exports and Imports.**

Exports of power from the Control Area will be treated like other Energy withdrawals within the Control Area. The exporting Person may export Certificates equivalent to the MWhs of power

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<sup>4</sup> For purposes of compliance with certain regulations, it is anticipated that some regulators may reference the aggregate characteristics of the Residual Mix with respect to retail LSEs whose total Certificates as designated in the final report fall short of their total retail load.

exported or may export power without associated Certificates. Moreover, Certificates may be exported without associated power to the extent consistent with applicable Attribute Laws.

Imports of power from outside the Control Area may produce Certificates. Ultimately, the total imported MWhs will need to be accounted for. Ideally, a method would be developed for recognizing certain of the specific attributes of some, if not all, imports to the extent allowed or required by the applicable Attribute Laws. The GIS will be flexible enough to permit the GIS Administrator to address whatever regulatory treatments are adopted with respect to attribute eligibility of imported power.

#### **11. Potential Database Adjustments Related to State Policies.**

An initial design assumption has been that the GIS database would include only the NEPOOL generation volumes reflected in the MSS database and generation volumes provided by Non-NEPOOL Generators, Included Generators (subject to established limits) and Non-NEPOOL Generator Representatives. Thus, it has been assumed that (i) certain generating units that are not connected to NEPOOL pool transmission facilities would have their outputs reduced in the GIS to the same extent that they are reduced in the MSS for line losses and (ii) the output of each generating unit would be measured at its interconnection meter and would thus be reduced for station service to the same extent that they are reduced in the MSS. Individual states could, however, implement their own procedures to allow and recognize for regulatory purposes the incremental generation amounts and attributes associated with such limitations, and such qualifying generation amounts could, when reliably metered, then be included in the GIS database and certificate program. The GIS will be flexible enough to reflect such additional data sources.

#### **12. Development of Emission Factors.**

Individual generators will supply the GIS Administrator with the emissions data necessary to issue Certificates. Details with respect to sources of emissions data, mechanisms for transferring data to the GIS Administrator, and the timing of data submittals will be resolved in the development of the GIS Operating Rules.

The GIS shall accommodate co-firing multi-fuel units. The GIS Administrator will develop a mechanism to allow new generation units (with no history) and retrofitted generation units (with anticipated reduced emissions) to adopt prospective emissions factors.

#### **13. Pumped Storage.**

With respect to pumped storage and generation, the real-time generation that runs the pumps will have certificates issued equal to the MWhs that the pumps use. When the stored water is released, additional generation (about 30 percent less than the Energy that initially pumped the water) occurs that is sold into the wholesale market and ultimately to retail consumers.

In order to balance the total amount of Certificates assigned to retail loads with the total MWhs of generation, the losses associated with pumped storage (approximately 30 percent) need to be addressed through the GIS Operating Rules.

While initially the emission reduction benefits of peak clipping from pumped storage facilities and other load management programs will not be explicitly recognized in the GIS, the GIS Administrator will propose GIS Operating Rules to reflect the benefits they provide to the region after initial implementation.

*Appendix 2.1*

**Included Generators**

<u>Unit</u>	<u>Account Holder</u>	Energy Regulatory <u>Agency</u>	Limit on MWhs for <u>Certificates</u>
Deer Island Treatment Plant- Anaerobic Digester	Massachusetts Water Resources Authority	Massachusetts Division of Energy Resources	40,000 MWh

### Non-NEPOOL Participant Account Holder Agreement

By this Agreement dated \_\_\_\_\_, 200\_\_, \_\_\_\_\_ (“Non-NEPOOL Participant”), [a \_\_\_\_\_ [corporation] with its principal office in \_\_\_\_\_] [a person whose principal place of residence is \_\_\_\_\_] agrees to comply with all of the terms and conditions of the Generation Information System Development and Administration Agreement dated as of October 26, 2001, by and between the entities that are Participants from time to time in the New England Power Pool, a voluntary association, pursuant to the Restated New England Power Pool Agreement dated as of September 1, 1971, as amended and restated from time to time (the “NEPOOL Participants”) and Automated Power Exchange, Inc. (the “GIS Agreement”), and the New England Power Pool Generation Information System Operating Rules (the “GIS Operating Rules”), each as amended, modified or restated from time to time, to the same extent as if the Non-NEPOOL Participant were a NEPOOL Participant, and, if and when the Non-NEPOOL Participant becomes liable to NEPOOL or ISO New England Inc. for financial obligations related to NEPOOL’s generation information system (the “GIS”), with the Financial Assurance Policy for Non-Participant Transmission Customers and the NEPOOL Billing Policy attached to the Restated NEPOOL Open Access Transmission Tariff, as modified to include financial obligations related to the GIS of entities that are not NEPOOL Participants (the “Policies”). The GIS Project Manager shall provide notice to the Non-NEPOOL Participant at least seven (7) days prior to the effectiveness of any change in NEPOOL’s GIS cost allocation methodology that would result in the Non-NEPOOL Participant becoming liable for financial obligations related to the GIS, and the Non-NEPOOL Participant may withdraw from the GIS prior to the effectiveness of such change without incurring such liabilities. Any Certificates created for the Non-NEPOOL Participant prior to the date of its withdrawal from the GIS shall remain in existence until the end of the applicable Trading Period, but the Non-NEPOOL Participant shall not participate in transfers of Certificate after the date of its withdrawal.

The Non-NEPOOL Participant acknowledges that it has received full and fair consideration for this agreement. Moreover, the Non-NEPOOL Participant agrees that the NEPOOL Participants, acting by and through the NEPOOL Participants Committee, may terminate its involvement in the New England Power Pool Generation Information System if at any time it fails to comply with the GIS Agreement, the GIS Operating Rules or the Policies.

IN WITNESS WHEREOF, the undersigned have caused this agreement to be executed as of the date above.

Non-NEPOOL Participant

[\_\_\_\_\_]

By: \_\_\_\_\_

Name:

Title:

ACKNOWLEDGED:  
New England Power Pool Participants

By: \_\_\_\_\_  
NEPOOL GIS Project Manager

### GIS Certificate Fields<sup>5</sup>

**Part 1** – The following shall be the data field options for Fuel Sources<sup>6</sup> (each GIS Generator and Importing Account Holder will select at least one): \*

Biodiesel\*\*

100% neat

Less than 100% neat

Biomass\*\* (select all types of biomass that apply)

Sustainable beginning operations on or after July 1, 1998

Low-emission, advanced biomass power conversion technology using Eligible

Biomass Fuel

Other Biomass (\_\_\_\_\_)

Sustainable with operations prior to July 1, 1998

Coal

Composite

Diesel

Digester gas\*\*

Efficient Resource (Maine)

Ethanol\*\*

Fuel cell\*\* (select all types of fuel cells that apply)

Utilizing renewable fuel sources

Utilizing Eligible biomass fuel, landfill or digester methane gas or hydrogen  
created through the use of Non Renewable Generation Landfill methane gas  
collected and conveyed directly to generation facility

Other

Geothermal\*\*

Hydroelectric/ Hydropower\*\* (select all types of hydroelectric/hydropower that apply)

Hydroelectric facility which has been licensed by FERC, has been exempted from  
such licensure, is the subject of a license application or notice of intent to seek a  
license from the FERC, has been found by the Connecticut Commissioner of  
Environmental Protection to be operating in compliance with the federal Clean  
Water Act, or has been found by the Canadian environmental assessment  
agency to be operating in compliance with said agency's resource objectives

Hydro-100 MW or greater

Hydro-greater than 30 MW but less than 100 MW

Hydro-small (30 MW or less)

Hydro-daily cycle

Hydro-weekly, with pondage

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<sup>5</sup> Fields identified with an asterisk (\*) will not change.

<sup>6</sup> Fuel Sources identified with two asterisks (\*\*) are eligible for Reserved Certificate transactions, as described in Rule 3.4.

Hydro – Other (\_\_\_\_\_)

Jet

Landfill gas\*\*
   
     100% Landfill gas
   
     \_\_\_\_% Landfill gas

Methanol\*\*

Municipal solid waste\*\*(select all types of municipal solid waste that apply)
   
     in conjunction with recycling
   
     clean construction debris
   
     clean demolition debris
   
     other

Natural Gas

Nuclear

Ocean\*\*
   
     Thermal
   
     Wave
   
     Tidal

Oil

Pumped Storage

Solar\*\*
   
     Thermal
   
     Photovoltaic

Trash-to-energy\*\*

Waste Oil

Wind\*\*

Wood (\_\_\_\_\_)

Multi-fuel Capability (yes/no)

**Part 2** - The following shall be the data field options for Renewable Portfolio Standard (“RPS”) Eligibility:

Connecticut

Class I renewable energy source (yes/no)
   
 Class II renewable energy source (yes/no)
   
 State Certification Number
   
 Date of eligibility: \_\_\_\_\_

Massachusetts

Qualified New Renewable Generation Unit (yes/no)
   
 RPS Renewable Resource (yes/no)
   
 Eligible MA Renewable for NOx Allowances claims from Public Benefit set-a-side (yes/no)
   
 Generation level per year or Energy imported per year above which qualifies as RPS

Renewable Resource: \_\_\_\_\_

State Certification Number



Date of eligibility: \_\_\_\_\_

Maine

Eligible for Renewable or Efficient Energy Source Qualification (yes/no)

Eligible for CO2 netting (yes/no)

**Part 3** - The following shall be the data fields for Emissions (each designated in pounds per quarterly reporting period or pounds per year for the generating unit):

Carbon dioxide

Carbon monoxide

Mercury

Nitrogen oxides

Particulate matter

Particulate matter 10 microns or less

Sulfur dioxides

Volatile organic compounds

CEM Reporting (yes/no)

**Part 4** - The following shall be the data field options for Labor Characteristics:

Majority of employees operating at generation plant are employed under collective bargaining agreement. (yes/no)

If generating plant experienced a labor dispute in the most recent calendar year, replacement workers were used. (yes/no)

**Part 5** - The following shall be the data field options for Vintage:

Vintage: \_\_\_\_\_ (month and year of commercial operation)\*

Repowering date and capacity addition: \_\_\_\_\_

FERC hydroelectric license relicensing date: \_\_\_\_\_

**Part 6** - The following shall be the data fields for asset information:

Asset identification (using identification number recorded with System Operator)\*

Generator identification number as reported to the EPA\*

Asset owner\*

Status (active, retired or expired)

Month and year of generation

Capacity

**Part 7** - Total MWh generated during the reporting period: \_\_\_\_\_ MWhs

**Part 8** - Location of generating unit (each GIS Generator and Importing Account Holder will select one):\*

- New England (ISO New England Control Area)
- New York (NY ISO control area)
- Quebec
- Maritime Provinces (including portions of Maine not in Control Area)
- Mid-Atlantic States (MACC)
- Mid-Western States (ECAR and MAIN)
- Ontario
- Southern States (SERC and FPCC)
- Other (WSCC, ERCOT, SPP and MAPP)

**Part 9** – Green-E Eligibility:

Green-E Registration Number: \_\_\_\_\_

Product Eligibility: (State product)

Tradable Renewable Certificate Eligibility: (yes/no)

Green-E fuel type (select all that apply):

Biogas

- Digester gas
- Landfill gas
- Landfill gas co-fired with natural gas (only landfill gas portion is eligible)

Biomass

- Agricultural crop or waste (non-animal waste only)
- Animal waste, animal litter or any other animal derived fuel
- Bioenergy crops (non-forestry only)
- Forestry derived fuel
- Mill residues
- Waste wood (must not contain painted, treated or pressurized wood)
- Other

Geothermal

Hydroelectric/Hydropower:

- Low Impact Hydropower Institute Certified
- Less than 30MW
- Hydroelectric relicensed by FERC 1986 or later

Ocean

- Wave
- Tidal

Solar-Photovoltaic

Wind

### Imported Unit Energy Seller Certification

\_\_\_\_\_ [a \_\_\_\_\_ [corporation] with its principal office in \_\_\_\_\_] [a person whose principal place of residence is \_\_\_\_\_] ("Seller") certifies to the Participants in the New England Power Pool that, other than the Sale (defined below), it has not retired, sold, claimed, represented as part of Energy sold elsewhere, or used to satisfy obligations in any jurisdiction outside of New England any of the fuel source, emission or labor attributes (the "Attributes") associated with the Imported Unit Energy it sold to \_\_\_\_\_, [a \_\_\_\_\_ [corporation] with its principal office in \_\_\_\_\_] [a person whose principal place of residence is \_\_\_\_\_] (the "Sale") . Seller further promises that it will not retire, sell or claim the Attributes, represent the Attributes as part of Energy sold or use the Attributes to satisfy obligations in another jurisdiction, other than in connection with the Sale.

Capitalized terms not otherwise defined herein have the meanings given to them in the Restated New England Power Pool Agreement or the New England Power Pool Generation Information System Operating Rules, each as amended and restated from time to time.

Under penalties of perjury, I declare that I have examined this certification and to the best of my knowledge and belief, this certification is true, correct and complete in all material respects.

[Seller]

By: \_\_\_\_\_

Name:

Title:

Date:

**Regulatory Agencies for Other Control Areas**

**New York**

**Regulatory Agencies to be Notified:** New York Department of Environmental Conservation; New York Department of Public Service

**Maritimes**

**Regulatory Agency to be Notified:** New Brunswick Department of the Environment and the Local Government

**Québec**

**Regulatory Agency to be Notified:** Québec Ministère de l'Environnement

## **REGULATORY AGENCIES**

### Energy Regulatory Agencies

Connecticut Department of Public Utility Control  
Maine Public Utilities Commission  
Massachusetts Department of Telecommunications and Energy  
Massachusetts Division of Energy Resources  
New Hampshire Public Utilities Commission  
Rhode Island Public Utilities Commission  
Vermont Public Service Board  
Vermont Department of Public Service

### Environmental Regulatory Agencies

Connecticut Department of Environmental Protection  
Maine Department of Environmental Protection  
Massachusetts Department of Environmental Protection  
New Hampshire Department of Environmental Services  
Rhode Island Department of Environmental Management  
Vermont Agency of Natural Resources

### State Attorneys General

Attorney General of Connecticut  
Attorney General of Maine  
Attorney General of Massachusetts  
Attorney General of New Hampshire  
Attorney General of Rhode Island  
Attorney General of Vermont

### State Renewable Funds

Rhode Island Renewable Energy Collaborative  
Connecticut Renewable Fund  
Massachusetts Technology Park Corporation as Administrator of Massachusetts Renewable Energy Trust  
Maine State Planning Office as Administrator of Maine Renewable Resource Fund